

## CRITERION 1 – CURRICULAR ASPECTS

### 1.4 FEEDBACK REPORT

#### 1.4.2 FEEDBACK PROCESS OF THE INSTITUTION MAY BE CLASSIFIED AS:

OPTIONS (SELECT ANY ONE THAT IS APPLICABLE):

- A. FEEDBACK COLLECTED, ANALYSED AND ACTION TAKEN ON FEEDBACK AND RELEVANT DOCUMENTS ARE MADE AVAILABLE ON THE INSTITUTIONAL WEBSITE
- B. FEEDBACK COLLECTED, ANALYSED AND ACTION HAS BEEN TAKEN
- C. FEEDBACK COLLECTED AND ANALYSED
- D. FEEDBACK COLLECTED
- E. FEEDBACK NOT OBTAINED/COLLECTED

#### Option A

<b>Criterion Number</b>	<b>1</b>
<b>Metric</b>	<b>1.4.2</b>
<b>Details</b>	Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management/School of Life Sciences
<b>Pages</b>	<b>1 to 35</b>

## ACTION TAKEN REPORT

### SCHOOL OF LIFE SCIENCES

2022-2023

SCHOOL	STAKE HOLDERS	CONSOLIDATED REPORT	ACTION TAKEN
School of Life Sciences	Academic Peers	<ul style="list-style-type: none"> <li>Incorporation of practical-oriented teaching methodology in the curriculum to enhance students' skills and knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Blended learning courses have been implemented for all the Life Sciences programmes to ensure that students develop both theoretical and practical learning.</li> </ul>
	Professionals	<ul style="list-style-type: none"> <li>Digital learning platforms like NPTEL/Swayam courses can be introduced to students.</li> </ul>	<ul style="list-style-type: none"> <li>An awareness campaign has been conducted to educate students about the benefits and availability of digital learning platforms like SWAYAM and NPTEL courses.</li> <li>Seven students have completed the Swayam course for the 2022-2023 academic year.</li> </ul>
	Parents	<ul style="list-style-type: none"> <li>Career guidance programmes and field projects can be incorporated.</li> </ul>	<ul style="list-style-type: none"> <li>Career guidance programs and field projects have been implemented into the curriculum to meet the specific requirements and interests of students.</li> <li>A seminar on career guidance was conducted for UG and PG students.</li> </ul>



# VELS



INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)  
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

PALLAVARAM - CHENNAI

ACCREDITED BY NAAC WITH 'A' GRADE

*Marching Beyond 30 Years Successfully*

INSTITUTION WITH UGC 12B STATUS

Alumni	<ul style="list-style-type: none"><li>Project work and internships are to be made mandatory in order to develop the student's skill development and career opportunities.</li></ul>	<ul style="list-style-type: none"><li>Project work and internships were introduced into the academic structure and made mandatory for all.</li></ul>
Employers	<ul style="list-style-type: none"><li>The courses in the curriculum can be integrated with other areas of the field like Genetics, Molecular Biology, and Immunotechnology.</li></ul>	<ul style="list-style-type: none"><li>Course syllabi have been updated to incorporate relevant topics and concepts from Genetics, Molecular Biology, and Immunotechnology, ensuring comprehensive coverage of key areas.</li></ul>
Students	<ul style="list-style-type: none"><li>Industrial visits and alumni Seminars can be implemented.</li></ul>	<ul style="list-style-type: none"><li>An industrial visit was included in the mandatory curriculum.</li><li>Students went on an industrial visit to Kerala and visited the Regional Agricultural Research Station and Mushroom Production Unit.</li></ul>



# **SAMPLE PROOF OF ACTION TAKEN REPORT**

# **INTERNSHIP**



भारत सरकार  
Government of India

सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

एम एस एम ई - परीक्षण केन्द्र, चेन्नै

MSME TESTING CENTRE, CHENNAI

प्रशिक्षण प्रमाण - पत्र

## Certificate of Training

This is to certify that **Mr. SAKASH (20110101)** Student of **B.Sc.,(Biochemistry)** of 2020-2023 batch of **VELS Institute of Science, Technology & Advanced Studies**, Chennai has successfully completed his Internship Training Programme in **Chemical & Microbiology Laboratory, MSME Testing Centre**, 65/1 GST Road, Guindy, Chennai - 600032. During the period From **17.10.2022 to 21.10.2022** of his Internship Training with us he was found punctual ,hard working and inquisitive.

We wish him all success in life.

Date: 07.11.2022

Chennai

File No: G/26026(60)/2022-2023/A-3/43

  
( Authorized Signatory)



समग्नेव जयते  
**MSME**

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
OUR STRENGTH IS OUR GROWTH

भारत सरकार

Government of India

सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

एम एस एम ई - परीक्षण केन्द्र, चेन्नै

MSME TESTING CENTRE, CHENNAI

प्रशिक्षण प्रमाण - पत्र

## Certificate of Training

This is to certify that **Ms. T.BAGAVATHI (20110102)** Student of  
B.Sc.,(Biochemistry) of 2020-2023 batch of **VELS Institute of Science, Technology  
& Advanced Studies**, Chennai has successfully completed her Internship Training  
Programme in Chemical & Microbiology Laboratory, MSME Testing Centre,  
65/1 GST Road, Guindy, Chennai - 600032. During the period From  
17.10.2022 to 21.10.2022 of her Internship Training with us she was found  
punctual, hard working and inquisitive.

We wish her all success in life.

Date: 07.11.2022

Chennai

File No: G/26026(60)/2022-2023/A-3/44

  
(Authorized Signatory)



सत्यमेव जयते  
**MSME**

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
(MSME TESTING CENTRE) CHENNAI

भारत सरकार

Government of India

सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

एम एस एम ई - परीक्षण केन्द्र, चेन्नै

**MSME TESTING CENTRE, CHENNAI**

प्रशिक्षण प्रमाण - पत्र

## Certificate of Training

This is to certify that **Ms. B.KEZIAH (20110103)** Student of

**B.Sc.,(Biochemistry)** of 2020-2023 batch of **VELS Institute of Science, Technology & Advanced Studies**, Chennai has successfully completed her Internship Training Programme in **Chemical & Microbiology Laboratory, MSME Testing Centre**, 65/1 **GST Road, Guindy, Chennai - 600032**. During the period From **17.10.2022 to 21.10.2022** of her Internship Training with us she was found **punctual, hard working and inquisitive.**

We wish her all success in life.

Date: 07.11.2022

Chennai

File No: G/26026(60)/2022-2023/A-3/45

  
(Authorized Signatory)



सत्यमेव जयते  
**MSME**

सूक्ष्म लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES  
OUR STRENGTH IS OUR EDGE

भारत सरकार

Government of India

सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

एम एस एम ई - परीक्षण केन्द्र, चेन्नै

MSME TESTING CENTRE, CHENNAI

प्रशिक्षण प्रमाण - पत्र

## Certificate of Training

This is to certify that **Mrs. M.MOHANA (20110104)** Student of **B.Sc.,(Biochemistry)** of 2020-2023 batch of **VELS Institute of Science, Technology & Advanced Studies, Chennai** has successfully completed her Internship Training Programme in **Chemical & Microbiology Laboratory, MSME Testing Centre, 65/1 GST Road, Guindy, Chennai - 600032.** During the period from **17.10.2022 to 21.10.2022** of her Internship Training with us she was found **punctual, hard working and inquisitive.**

We wish her all success in life.

Date: 07.11.2022

Chennai

File No: G/26026(60)/2022-2023/अ-3/46

  
(Authorized Signatory)



सत्यमेव जयते  
**MSME**

सूक्ष्म लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES  
OUR STRENGTH IS OUR JOY

भारत सरकार

Government of India

सूक्ष्म लघु एवं मध्यम उद्यम मंत्रालय

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

एम एस एम ई - परीक्षण केन्द्र, चेन्नै

**MSME TESTING CENTRE, CHENNAI**

प्रशिक्षण प्रमाण - पत्र

## Certificate of Training

This is to certify that **Ms. V.S.PRIYANKA (20110105)** Student of B.Sc., (Biochemistry) of 2020-2023 batch of VELS Institute of Science, Technology & Advanced Studies, Chennai has successfully completed her Internship Training Programme in Chemical & Microbiology Laboratory, MSME Testing Centre, 65/1 GST Road, Guindy, Chennai - 600032. During the period From 17.10.2022 to 21.10.2022 of her Internship Training with us she was found punctual, hard working and inquisitive.

We wish her all success in life.

Date: 07.11.2022

Chennai

File No: G/26026(60)/2022-2023/A-3/47

  
(Authorized Signatory)

**COLLABORATIVE/  
RESEARCH PROJECT**



20.03.2024

Dr. G.Abirami  
Department of Biotechnology,  
VISTAS, Pallavaram – 117.

Respected Madam,

We would like to express our willingness to serve as a collaborator on the research proposed under the title "Characterization of Crude oil degrading marine bacterium *Bacillus licheniformis*". In particular under Industry- Institute collaboration.

This collaboration is part of the research and development work at Eukpro Biotech Private Limited and no funds from the grant will be used in intramural research, neither will we accept any form remuneration, whether in the form of salary, honoraria, or travel expenses. We will provide scientific input (and mentoring). Further, this research work would help to promote and facilitate environmental research, we would provide requested research materials and technical expertise for research purpose.

I look forward to working with you on this collaboration

Sincerely

  
Dr. C. RAMPRASAD  
Director

### Eukpro Biotech Private Limited

📍 No. A1-18/21, 4th Main Road, New Colony, Chrompet, Chennai - 600 044.  
☎ 044-2251 0777  
✉ [info@eukpro.com](mailto:info@eukpro.com) / [sales@eukpro.com](mailto:sales@eukpro.com)  
🌐 [www.eukpro.com](http://www.eukpro.com)



08.09.2023

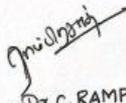
**TO WHOM SO EVER IT MAY CONCERN**

We hereby acknowledge you that Dr. M. Jayanthi, Assistant Professor, Department of Biotechnology, underwent training on Microbial enzyme production. We believe that training would help her to enhance her skills and knowledge on microbial product production, and which would be support her professional development.

The training program was completed with the given timeframe (07.08.2023 to 08.09. 2023). Upon completion, we encourage you to share your newly acquired knowledge with you colleagues and students to enhance the overall performance.

Thank you for your commitment to your professional growth, and we wish you a successful training.

Sincerely

  
Dr. C. RAMPRASAD  
Director



**Eukpro Biotech Private Limited**

📍 No. A1-18/21, 4th Main Road, New Colony, Chrompet, Chennai - 600 044.  
☎ 044-2251 0777  
✉ [Info@eukpro.com](mailto:Info@eukpro.com) / [sales@eukpro.com](mailto:sales@eukpro.com)  
🌐 [www.eukpro.com](http://www.eukpro.com)

## BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "DETECTION AND DIAGNOSTICS OF CANINE PARVO VIRUS (CPV) IN DOGS USING THE METHOD OF ENZYMATIC IMMUNO ASSAY" being submitted by Mr. SELVAGANAPATHI in partial fulfilment of the requirement for the award of Degree of Master of Science in Biochemistry, is an authentic work carried out by her under my supervision and guidance. To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/ Institute for the award of any Degree or Diploma.

Certified by

Dr.R. Padmini.

Head of the Department,

Department of Biochemistry

VISTAS

(Signature)

Examiners

Dr.R.PADMINI  
Associate Professor & Head  
Department of Biochemistry  
School of Life Sciences,  
VISTAS  
Pallavaram, Chennai - 600 117.

Guided by

Dr.P.Amudha,

Assistant Professor,

Department of Biochemistry,

VISTAS

(Signature)

P. P. S. S.  
Dr. P. AMUDHA  
M.Sc., M.Phil., Ph.D.  
Assistant Professor  
Department of Biochemistry  
School of Life Sciences (VISTAS)  
Pallavaram, Chennai - 600 117.

Date

8/3/2023

## BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled **Characterization and extraction exopolysaccharide from freshwater diatoms for its invitro anti cancer activity**" is being submitted by **Barath Kumar. M** in partial fulfillment of the requirement for the award of Degree of Master of Science in Biochemistry is an authentic work carried out by her under my supervision and guidance. To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/ Institute for the award of any Degree or Diploma.

Certified by

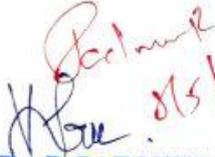
  
Head of the Department,  
Department of Biochemistry,  
VISTAS

Guided by

Dr. Usha Rani  
Associate Professor,  
Department of Biochemistry,  
VISTAS

(Signature)

Examiners

  
  
**Dr. R. PADMINI**  
**Associate Professor & Head**  
**Department of Biochemistry**  
**School of Life Sciences,**  
**VISTAS**  
**Pallavaram, Chennai - 600 117.**

(Signature)

Date 08/05/2023

## BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "**Green Synthesis and Characterization of Silver Nanoparticles Using *Aristolochia Bracteolata* Leaves Extract and Evaluation of Antioxidant Anti-Inflammatory Activities**" is being submitted by **R. RAMEETH**, in partial fulfillment of the requirement for the award of Degree of Master of Science in Biochemistry, is an authentic work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/ Institute for the award of any Degree or Diploma.

Certified by



**Dr. R. PADMINI**

Head of the Department,

Department of Biochemistry,

VISTAS

Guided by

**Dr. P. AMUDHA**

Assistant Professor,

Department of Biochemistry,

VISTAS

**Dr. R. PADMINI**  
Associate Professor & Head  
Department of Biochemistry  
School of Life Sciences,  
VISTAS  
Pallavaram, Chennai - 600 117.

(signature)



Examiners



(signature)

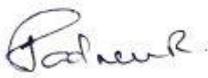


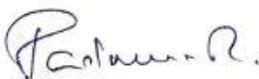
**Dr. P. AMUDHA** M.Sc., M.Phil., Ph.D.,  
Assistant Professor  
Department of Biochemistry  
School of Life Sciences (VISTAS)  
Pallavaram, Chennai - 600 117

Date 2/5/2022

## BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "Green synthesis of Titanium dioxide nanoparticles using aqueous extract of Dieffenbachia seguine leaves and their characterization, and anti-Inflammatory activity" is being submitted by T. Janakiraman, in partial fulfillment of the requirement for the award of Degree of Master of Science in Biochemistry, is an authentic work carried out by her under my supervision and guidance. To the best of my knowledge, the matter embodied in the thesis has not been submitted to any other University/ Institute for the award of any Degree or Diploma.

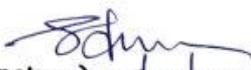
Certified by   
Head of the Department,  
Department of Biochemistry,  
VISTAS

  
(Signature)

Examiners

  
**Dr. R. PADMINI**  
Associate Professor & Head  
Department of Biochemistry  
School of Life Sciences,  
VISTAS  
Pallavaram, Chennai - 600 117.

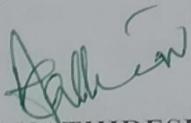
Guided by  
Dr. C. Shobana  
Associate Professor,  
Department of Biochemistry,  
VISTAS

  
(Signature) 05/05/2023

Date **Dr. C. SHOBANA**  
Associate Professor,  
Department of Biochemistry,  
School of Life Sciences  
Vels Institute of Science,  
Technology & Advanced Studies (VISTAS)  
Chennai - 600 117.

## BONAFIDE CERTIFICATE

I hereby certify that this project work is a bonafide work of **E. AROKIA PEMINA RAJ** Register Number: 20215101 on "SCREENING OF BACTERIAL AND FUNGAL CONTAMINATION IN SURGICAL AND N95 FACE MASK" carried out at the Department of Microbiology, School of Life Sciences in partial fulfilment for the award of the degree in M.Sc. Immunology and Microbiology, Vels Institute of Science, Technology and Advanced Studies (VISTAS) during the academic year 2021-2022. This project work or any part thereof has not been submitted elsewhere for award of any other degree or diploma.

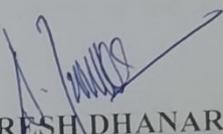
  
Dr.A.K.KATHIRESHAN.,Ph.D.

Professor & Head ,

Department of Microbiology

VISTAS

Pallavaram,Chennai – 600117

  
Dr.SURESH DHANARAJ.,Ph.D

Project Supervisor & Professor

Department of Microbiology

VISTAS

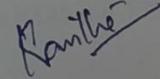
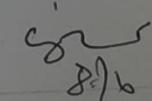
Pallavaram,Chennai -600 117

Date :

Place : Chennai – 600 117



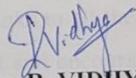
EXAMINERS

1. 
2. 

## BONAFIDE CERTIFICATE

I hereby certify that this project work is a bonafide work of Mr. K.RAM KUMAR, Register Number: 20215112 on "ISOLATION OF BACTERIA ASSOCIATED WITH COMMERCIAL MOTORCYCLE HELMETS." carried out at the Department of Microbiology, School of Life Sciences in partial fulfilment for the award of the degree in M.Sc. Immunology and Microbiology, Vels Institute of Science, Technology and Advanced Studies (VISTAS) during the academic year 2021-2022. This project work or any part thereof has not been submitted elsewhere for award of any other degree or diploma.

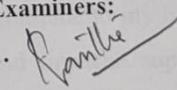
Dr. A. K. KATHIRESHAN., Ph.D.  
Professor & Head,  
Department of Microbiology  
VISTAS  
Pallavaram, Chennai- 600117

  
Mrs. R. VIDHYA  
Project Supervisor & Assistant Profe  
Department of Microbiology  
VISTAS  
Pallavaram, Chennai-600117

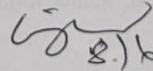
Date : 8/6/2022  
Place: Chennai - 600 117

Examiners:

1.



2.



## BONAFIDE CERTIFICATE

I hereby certify that this Project work is bonafide work of  
**KAMALESH. K – 20215114** on “**EVALUATION OF PHYTOCHEMICAL,  
ANTIOXIDANT, ANTIBACTERIAL, and ANTIDIABETIC AND  
ANTICANCER ACTIVITY OF *Solanum trilobatum* L. LEAF EXTRACT**”  
carried out at Department of Microbiology in partial fulfilment for the award of  
the degree of Master of Science in Immunology and Microbiology, **VELS  
INSTITUTE OF SCIENCE TECHNOLOGY AND ADVANCED STUDIES  
(VISTAS)**, during the academic year 2021-2022. The project work or any of this  
has not been given elsewhere for award of any other degree.

**Dr. A.K. KATHIRESAN, Ph.D.**  
Head of the Department  
Department of Microbiology  
VISTAS,  
Pallavaram, Chennai – 117

*S.B. Prabha*  
**Dr. S.B. PRABHA, Ph.D.**  
Project Guide  
Department of Microbiology  
VISTAS,  
Pallavaram, Chennai – 117

Date: 08/06/22

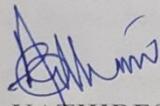
Place: Chennai – 117

Examiners: 1. *Santhia*

2. *8/6*

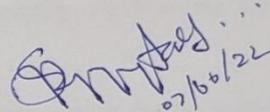
### BONAFIDE CERTIFICATE

I hereby certify that this project work is a bonafide work of Mr. ISFAQ ASIF, Register Number: 20215113 on "ISOLATION AND CHARACTERISATION OF KERATINASE PRODUCING FUNGI FROM POULTRY WASTE" carried out at Department of Microbiology, VISTAS in partial fulfilment for the award of the degree in M.Sc Immunology and Microbiology, Vels Institute of Science, Technology and Advanced Studies (VISTAS) during the academic year 2021-2022. This project work or any part there of has not been submitted elsewhere for award of any other degree or diploma.



**Dr. A. K. KATHIRESHAN, Ph.D**

Director, School of Life Sciences &  
Head, Department of Microbiology  
VISTAS  
Pallavaram, Chennai- 600117



**Dr. RAJYOGANANDH, Ph.D**

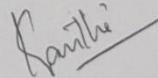
Assistant Professor,  
Department of Microbiology  
VISTAS  
Pallavaram, Chennai- 600117



Date: 08/06/2022

Place: Chennai

**EXAMINERS:**



**NPTEL**



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**MADHUMITHA L**

for successfully completing the course

**Cell Culture Technologies**



with a consolidated score of **76** %

Online Assignments	23.75/25	Proctored Exam	52.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **1634**

**Prof. B. V. Ratish Kumar**  
Chairman, Centre for Continuing Education  
IIT Kanpur

**Aug-Oct 2023**

**(8 week course)**

**Prof. Satyaki Roy**  
NPTEL Coordinator  
IIT Kanpur



Indian Institute of Technology Kanpur



Roll No: NPTEL 23BT68S633502827

To verify the certificate



No. of credits recommended: 2 or 3



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**THANUSH VT**

for successfully completing the course

**Introduction to Cell Biology**

with a consolidated score of **69** %

Online Assignments	22.5/25	Proctored Exam	46.22/75
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Total number of candidates certified in this course: **952**

**Prof. M. S. Santhanam**  
Dean, International Relations and Outreach  
IISER Pune

**Aug-Oct 2023**

**(8 week course)**

**Prof. Andrew Thangaraj**  
NPTEL, Coordinator  
IIT Madras



IISER - Indian Institute of Science Education  
and Research Pune



Roll No: NPTEL 23BT50S13355494

To verify the certificate



No. of credits recommended: 2 or 3

# **INDUSTRIAL VISIT**

To,  
The Registrar  
VISTAS  
Chennai

Date: 24/03/2023

Respected Sir,

SUBJ: Industrial visit report from 20/03/2023 to 23/03/2023

As we have visited Wayanad for the Industrial Visit along with 4 (four) faculty and 42 (forty two) students of Microbiology department from 20<sup>th</sup> march till 23<sup>rd</sup> march 2023 as per your approval. I have attached the 3 days schedule below.

Day 1- Visit to Banasura Spice Industry (20<sup>th</sup> March 2023)

The technical person explained the Biological names of the plants and its uses

The properties of medicinal plants and habitat were explained

Visited the herbal Garden and the herbal shop.



Day 2- Visit to Regional Agricultural Research Station- Ambalavayal (21<sup>st</sup> March 2023)

Dr. Sameera Assistant prof in RARS, explained their institution overall which was government established 1946. Visited the plant tissue culture lab and students gained hands on experience



Figure:1 Students Visit to Tea Estate



Day 3- Site visiting-Tea Estate and Edakkal Caves (23<sup>rd</sup> March 2023)

Department of Microbiology - Name list of students: 3rd Bsc and 2<sup>nd</sup> Msc

S.No	Reg.No	Student Name	Gender	Age
1	20113103	GUNA	M	20
2	20113111	MARK	M	20
3	20113129	TANISH	M	22
4	20113136	VIGNESH	M	20
5	20113144	SOMNATH	M	20
6	20113101	ANTHONY	M	21
7	20113122	SANJAY	M	20
8	20113121	RUPESH	M	21
9	20113116	NTHIN	M	20
10	20113105	JAYAPRAKASH	M	19
11	20113109	KOTTISWARAN	M	20
12	20113102	DHANASHREE	F	19
13	20113106	JEEVASRI	F	20
14	20113108	KEERTHI	F	20
15	20113110	LOKANETRA	F	20
16	20113119	PRIYA	F	20
17	20113120	RUPAASREE	F	21
18	20113123	SHARIKA	F	20
19	20113124	SHIREEN	F	20
20	20113128	SRUTHILAYAH	F	20
21	20113132	UMAIRA	F	20
22	20113138	VISHNU PRIYA	F	20
23	20113137	VIJAYALAKSHMI	F	20
24	20113139	YAMINI	F	20
25	20113147	GOMATHI	F	20
26	20113148	DHINISHA	F	20
27	19113118	PREETHI ILAKIYA	F	22
28	20113149	RESHMA	F	25
29	20113115	MYLIN	F	22
30	20113901	TAMIL SELVI	F	20
31	21215114	SURYA KALAI	F	22
32	21215109	RITIKA	F	22
33	21215111	STREYA	F	22
34	21215112	SARU PRABHA	F	22
35	21215115	YASH WANTH	M	23
36	21215116	HARIS RAJA	M	22

37	21215901	DESOSA	M	22
38	21215107	PAVITHRAN	M	25
39	21215113	SHARUK SATYAN	M	25

ESCORT (STAFF):

- Dr. S.B. PRABHA, ASST. PROFESSOR, DEPT. OF MICROBIOLOGY.
- Dr. K. MURUGAN - ASST. PROFESSOR, DEPT OF MICROBIOLOGY.
- Dr. K. SUDARSHAN - ASST. PROFESSOR, DEPT. OF MICROBIOLOGY.
- Dr. K. SELVAKUMAR- ASST PROFESSOR, DEPT OF MICROBIOLOGY.

  
Dr. A.K. RATHNESAN, M.Sc., Ph.D.,  
Professor & Head, Department of Microbiology,  
School of Life Sciences, IIScAS  
Pollaraon, Chennai - 600 117.

# **CURRICULUM**

Date: 29-04-2021

**MINUTES OF MEETING OF THE BOARD OF STUDIES**  
**SCHOOL OF LIFE SCIENCES**

The meeting of the Board of Studies in **Biochemistry** (UG & PG) of the Department of **Biochemistry**, School of Life Science, VISTAS held on 29/4/2021 at 11.30 am to discuss the Rules and Regulations, Course Structure, Curriculum and Syllabus for the following Programme of **UG & PG Programme in the Curriculum of B.Sc and M.Sc Biochemistry** as well as for the newly introduced Programme of **B.Sc Nutrition and Dietetics** which is to be followed from the academic year 2021-2022

The following members were present for the BoS meeting:

S. No.	Members	Role
1	Dr. R. Padmini Assistant Professor & Head Department of Biochemistry VISTAS, Chennai	Chair person
2	Dr. P. Kalai selvi Associate Professor, Department of Medical Biochemistry, Dr. ALPGIBMS, University of Madras, Taramani Campus, Chennai	External expert - academic
3	Dr. Usharavi, Assessor at NABET, Quality council of India, Chennai, India	External expert - industry
4	Dr. S. Perumal, Assistant Professor, Department of Biochemistry, VISTAS, Chennai	Internal member
5	Ms. Sathya Medical Coder, Omega Health Care Chennai	Alumni

#### AGENDA OF THE MEETING

ItemNo.	Particulars
BoS / 2021/ SLS / UG & PG /7.1	Review and confirm minutes of 6 <sup>th</sup> BOS meeting held on 18/05/2018
BoS/2021/SLS /UG& PG/7.2	Review the curriculum based on Choice Based Credit System (CBCS) and Learning Outcome based Curriculum Develop Framework (LOCF).
BoS/2021/SLS /UG /7.3	To review revision for new syllabus for B.Sc Biochemistry from regulation 2018 to regulation 2021
BoS/2021/SLS / PG/7.4	To review revision for new syllabus for M.Sc Biochemistry from regulation 2018 to regulation 2021
BoS/2021/SLS /UG & PG/7.5	Feedback from Stakeholders to ensure that the syllabus of the courses include the state-of-the-art technologies focusing on skill development, employability, and entrepreneurship
BoS/2021/SLS /UG /7.6	New Programme introduced: BSc Nutrition and Dietetics
BoS/2021/SLS /UG & PG/7.7	To review the UGC policy for CBCS and LOCF curriculum.

#### MINUTES OF THE MEETING

Dr. R. PADMINI, Assistant Professor & Head, Chairman, BoS initiated the meeting with a warm welcome and introduced the external members, the internal and co-opted members, and thanked them for accepting the invitation to the Board of Studies meeting.

##### Item No: 1 BoS / 2021 / SLS / UG & PG / 7.1

The sixth BoS Meeting for BSc and MSc Biochemistry under regulation 2018 was held on 24/04/2017 and confirmed the following points

To implement the guidelines and suggestions of the new education policy

- Syllabi for the soft skills offered by the Department of Biochemistry
- Value Added Courses for First and Second Year Students
- Admission Details
- Department Vision, Mission in line with Institute's vision and Mission

**Minutes are Reviewed and Confirmed**

**Item No: 2 BoS / 2021 / SLS / UG & PG / 7.2**

**Introduced new courses and develop Curriculum based on Choice Based Credit System (CBCS) and Learning Outcome based Curriculum Framework (LOCF).**

Discussed Rules and Regulations, Course Structure, Curriculum and Syllabus based on Curriculum based on Choice Based Credit System (CBCS) and Learning Outcome based Curriculum Framework (LOCF)

**Item No: 3 BoS/2021/SLS/UG/7.3**

- To develop the curriculum based on Learning Outcome-based Curriculum Framework (LOCF).
- To consider the present trend in the respective fields.
- To implement the guidelines and suggestions of the new education policy while preparing the curriculum.
- To eliminate the obsolete syllabus contents and to introduce the latest / updated technologies, new knowledge and practices.
- To design the curriculum focusing on Skill Development, Employability and Entrepreneurship.

**% of Syllabus Revision in the Program: BSc Biochemistry - 25 %**

Available Course (2018-2019)			Revised Course (2021-2022)		Percentage of syllabus revised
S.No	Code	Title	Code	Title	
1	18CBBC12	Nutritional Biochemistry	21CBBC12	Basics of Nutrition	40%
2	18CBBC22	Biochemical Techniques	21CBBC22	Analytical Biochemistry	40%
3	18CBBC31	Enzymes & Intermediary Metabolism I	21CBBC31	Enzymes & Intermediary Metabolism I	40%
4	18CBBC32	Clinical Biochemistry I	21CBBC32	Clinical Biochemistry I	40%
5	18PBBC32	Practical VI – Enzymology & Clinical Biochemistry I	21PBBC31	Practical 5- Enzyme & Clinical Biochemistry I	40%
6	18CBBC41	Enzymes & Intermediary Metabolism II	21CBBC41	Enzymes & Intermediary Metabolism II	40%
7	18DBBC51	Basics of molecular biology	21CBBC51	Molecular Biology	40%
8	18DBBC61	Immunobiology	21DBBC54	Immunobiology	40%
9	18DBBC62	Biotechnology	21DBBC62	Biotechnology	40%

**NEW COURSES INTRODUCED**

S.NO	Code	Title
1	21CBBC33	Cell and developmental biology
2	21PBBC42	Methods in cell biology
3	21PBBC22	Biomolecule preparation
4	21PBBC51	Molecular biology lab
5	21CBBC23	Bioenergetics and membrane biology

6	21PBBC52	Immunology lab
7	21CBBC61	Biochemistry of cell signalling
8	21DBBC51	Environmental biochemistry
9	21DBBC52	Forensic biochemistry
10	21DBBC53	Protein Biochemistry
11	21DBBC63	Inheritance biology

**Item No: 4 BoS/2021/SLS / PG/ 7.4**

- To develop the curriculum based on Learning Outcome-based Curriculum Framework (LOCF).
- To consider the present trend in the respective fields.
- To implement the guidelines and suggestions of the new education policy while preparing the curriculum.
- To eliminate the obsolete syllabus contents and to introduce the latest / updated technologies, new knowledge and practices.
- To design the curriculum focusing on Skill Development, Employability and Entrepreneurship.

**% of Syllabus Revision in the Program: MSc Biochemistry - 28 %**

Available Course (2018-2019)			Revised Course (2021-2022)		Percentage of syllabus revised
S.No	Code	Title	Code	Title	
1	18DMBC11	Human Physiology	21DMBC11	Human Physiology	40%
2	18DMBC12	Fundamentals of Computers, Biostatistics And Research Methodology	21DMBC12	Research methodology	40%
3	18CMBC22	Intermediary Metabolism	21CMBC22	Intermediary Metabolism	40%
4	18CMBC32	Clinical Biochemistry	21CMBC23	Clinical Biochemistry	40%
5	18DMBC22	Biotechnology and IPR	21DMBC21	Biotechnology and IPR	40%
6	18CMBC31	Genetics & Molecular Biology	21CMBC31	Genetics & Molecular Biology	40%
7	18MBC41	Toxicology & Forensic Biochemistry	21CMBC41	Toxicology & Forensic Biochemistry	40%

**NEW COURSES INTRODUCED**

S.No	Code	Title
1	21CBBC13	Cellular Biochemistry
2	21SSKP11	Soft Skill 1
3	21CMBC32	Molecular Developmental Biology
4	21CMBC33	Plant & Animal Tissue culture
5	21SSKP21	Soft Skill 2
6	21PMBC31	Practical Genetics & Molecular Biology
7	21SSKP31	Soft Skill 3
8	21CMBC21	Enzyme & Enzyme Technology
9	21CMBC12	Research Methodology

10	21CMBC21	Practical Enzymology
11	21PMBC22	Practical clinical biochemistry

**Item No: 5 BoS/2021/SLS /UG & PG/ 7.5**

**Feedback from Stakeholders to ensure that the syllabus of the courses include the state-of-the-art technologies focusing on skill development, employability, and entrepreneurship**

Feedback from Stakeholders:

S.No	Name & Designation	Comments	Role
1	Dr. Usharavi, Assessor at NABET, Quality council of India, Chennai, India	The syllabus is designed to align with the current trends in both industry and academia.	Industry Expert
2	Dr. P. Kalai selvi Associate Professor, Department of Medical Biochemistry, Dr. ALPGIBMS, University of Madras, Taramani Campus, Chennai	The curriculum facilitates the cultivation of essential skills among students. Additionally, it offers increased hands-on exposure, bridging the gap between theory and practice.	Academic expert
3	Ms. Sathya Medical Coder, Omega Health Care Chennai	The curriculum is aligned with the latest technological advancements.	alumni

**Item no 6: BoS / 2021 / SLS / UG / 7.6**

Introduction of New Programme : BSc Nutrition and Dietetics as per annexure II (c)

**Item no 7: BoS / 2021 / SLS / UG & PG / 7.7**

Status of Implementation of CBCS, ECS & LOCF:

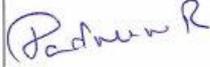
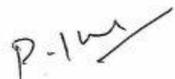
- Resolved to recommend that the Rules and Regulations, Course Structure, Curriculum & Syllabus for the programmes B.Sc Biochemistry and MSc Biochemistry are developed based on Choice Based Credit System (CBCS), Elective Course System (ECS) and Learning outcome-based curriculum framework (LOCF) guidelines of UGC for the Academic year 2021 – 2022 be approved.
- Introduction of new courses in both UG & PG programmes are focused on employability/entrepreneurship/skill development which is introduced during the Academic year 2021-2022 is enclosed in the below Annexure II.

**Considered the Programme Curriculum and Syllabus presented before the Board of Studies and discussed in details and are resolved as follows:**

- Resolved to recommend that the Curriculum & Syllabus introduced for the programmes B.Sc Biochemistry and M.Sc Biochemistry are developed and designed as per the guidelines and Model Curriculum Framework of UGC for the Academic year 2021 - 2022 has been approved by the members of Board of Studies.

**New Curriculum & Syllabi of UG & PG Programmes courses focused on Activities / Content with direct on Employability / Competency / Entrepreneurship / Skill development / Cross Cutting Issues / Interdisciplinary enclosed in Annexure III.**

**Signature of the Members:**

Member category	Name and Designation	Signature
Internal	Dr. R. Padmini Assistant Professor & Head Department of Biochemistry VISTAS, Chennai	
External	Dr. P. Kalai selvi Associate Professor, Department of Medical Biochemistry, Dr. ALPGIBMS, University of Madras, Taramani Campus, Chennai	
External	Dr. Usharavi, Assessor at NABET, Quality council of India, Chennai, India	
Internal	Dr. S. Perumal, Assistant Professor, Department of Biochemistry, VISTAS, Chennai	
Alumni member	Ms. Sathya Medical Coder, Omega Health Care Chennai	